## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Before the Board of Patent Appeals and Interferences

In re Patent Application of

NAKAYAMA et al. Atty. Ref.: 249-336 (AMK)

Serial No. 10/812,304 TC/A.U.: 3726

Filed: March 30, 2004 Examiner: S. Afzali

For: DISC ROLL (AS AMENDED)

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April 13, 2010

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

## **REPLY BRIEF**

In reply to the Examiner's Answer dated February 18, 2010, Appellants submit this Reply Brief under 37 C.F.R. §41.41.

In the "Response to Arguments" section of the Examiner's Answer, the Examiner questions the change in criticality as claimed from 5-55% by weight to 20-40% by weight. In this context, criticality of the claimed ranges is not absolute. As evidenced by the described examples, it is feasible that there exist multiple levels of criticality, one or more of which may distinguish an invention from the prior art. It is routine practice in U.S. patent law to narrow claim scope during prosecution if necessary or desirable in view of many factors. For example, the prior art cited during prosecution may be a factor rendering it necessary or desirable to narrow claim scope. Alternatively, in view of the

time elapsed during prosecution of an application, commercial applications of the invention may inspire the desirability of narrower claims, such as a narrow range of critical parameters. Of course, those of ordinary skill in the art will appreciate other factors that may arise during prosecution of a patent application to support the necessity or desirability of a narrower claim scope.

With regard to the specific references to the examples described in the specification, Appellants provided a detailed discussion of the significance of particular parameters particularly relating to scratch resistance and the resulting burden to manufacturers. The Examiner contends that "these features upon which the Appellant rely are not recited in the rejection claim(s)," but it is the identification of critical ranges that is consistent with the described practical application and that clarify the points above with regard to narrowing the claim scope during prosecution.

With regard to claims 24 and 25, the Examiner seeks evidence that it is not mathematically impossible in Ohshima to have clay content of particles of 5 μm or larger in an amount of 15% (claim 24) or 10% (claim 25) by weight based on the weight of the clay. The calculations for determining this are the same as those used by the Examiner to determine that "Ohshima et al.'s explicit teaching of clay content of particles with an average particle size of 0.5 μm makes it mathematically impossible to have clay content of particles with a particle size of 5 μm or larger in an amount of 30% or higher by weight based on the weight of the clay," addressing claim 10 on page 4 of the Examiner's Answer, lines 17-20. Using the same analysis, it would be discovered that the 15% and 10% amounts are not mathematically impossible in Ohshima. As noted, Ohshima in fact

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is silent with regard to such clay content and thus is not applicable against claims 24 and 25.

For at least these reasons and the reasons discussed in the Appeal Brief, reversal of the rejections is respectfully requested.

Respectfully submitted,

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